

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A receiver, including:

an input unit which inputs a plurality of signals on which a processing is to be performed; a switching unit which switches a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients to be temporarily utilized and a plurality of second weighting coefficients which have higher adaptabilities;

a controller which instructs the switching unit to switch the weighting coefficients ~~between from~~ the plurality of first weighting coefficients ~~and to~~ the plurality of second weighting coefficients; and

a synthesizer which synthesizes results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, ~~wherein the signals input in the input unit are burst signals, and the controller requests the switching of the plurality of weighting coefficients in the middle of a burst signal.~~

2. (Currently amended) A receiver, ~~includes~~ including:

an input unit which inputs a plurality of signals on which a processing is to be performed;

a switching unit which switches a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;

a controller which instructs the switching unit to switch the weighting coefficients ~~between from~~ the plurality of first weighting coefficients ~~and to~~ the plurality of second weighting coefficients ~~in a prescribed interval, where the plurality of signals are inputted in a sequential manner during the interval;~~ and

a synthesizer which synthesizes results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, wherein the signals input in the input unit are burst signals, and the controller requests the switching of the plurality of weighting coefficients in the middle of a burst signal.

3. (Original) A receiver according to Claim 2, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

4. (Original) A receiver according to Claim 3, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

5. (Currently amended) A receiver according to Claim 2, wherein the plurality of first weighting coefficients is set by utilizing the plurality of second weighting coefficients ~~which have already been set used in the past for multiplication by the synthesizer.~~

6. (Original) A receiver according to Claim 2, further including:
a weighting coefficient updating unit which updates a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;
a gap estimator which estimates gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing a correlation processing between at least one of the plurality of inputted signals and a known signal; and
a gap compensator which generates the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps.

7. (Currently amended) A receiver according to Claim 2, wherein the burst signals inputted at the input unit during the prescribed interval in the sequential manner include at least a training signal and a data signal signals having different characteristics, and wherein the controller instructs to switch the weighting coefficients between from the first weighting coefficients and to the second weighting coefficients when it an end of the training signal is detected a shift point where the characteristics of the signals change.

8. (Original) A receiver according to Claim 6, wherein the controller inputs sequentially the plurality of third weighting coefficients updated in the weight coefficient updating unit and instructs the switching unit to switch the weighting coefficients between the first weighting

coefficients and the second weighting coefficients when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.

9. (Currently amended) A receiving method, including:

inputting a plurality of signals on which a processing is to be performed;

switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients to be temporarily utilized and a plurality of a second weighting coefficients which have higher adaptabilities;

giving an instruction of switching the weighting coefficients between from the plurality of first weighting coefficients and to the plurality of second weighting coefficients; and

synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, wherein

the signals to be input are burst signals, and

the switching between the plurality of first weighting coefficients and the plurality of second weighting coefficients is requested in the middle of a burst signal.

10. (Currently amended) A receiving method, including:

inputting a plurality of signals on which a processing is to be performed;

switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;

giving an instruction of switching the weighting coefficients between from the plurality of first weighting coefficients and to the plurality of second weighting coefficients in a

~~prescribed interval, where the plurality of signals are inputted in a sequential manner during the interval; and~~

synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, wherein
the signals to be input are burst signals, and
the switching between the plurality of first weighting coefficients and the plurality of
second weighting coefficients is requested in the middle of a burst signal.

11. (Original) A receiving method according to Claim 10, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

12. (Original) A receiving method according to Claim 11, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

13. (Currently amended) A receiving method according to Claim 10, wherein the plurality of first weighting coefficients may be set by utilizing the plurality of second weighting coefficients used in the past for multiplication in the synthesizing which have already been set.

14. (Original) A receiving method according to Claim 10, further including:

updating a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;

estimating gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing a correlation processing between at least one of the plurality of inputted signals and a known signal; and

generating the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps.

15. (Currently amended) A receiving method according to Claim 10, wherein the burst signals inputted ~~during the prescribed interval~~ in the sequential manner include at least a training signal and a data signal ~~signals having different characteristics~~ and wherein, in giving the instruction of switching the weighting coefficients ~~between~~ from the first weighting coefficients and to the second weighting coefficients, the instruction is given when ~~it~~ an end of the training signal is detected ~~a shift point where the characteristics of the signals change~~.

16. (Original) A receiving method according to Claim 14, wherein the plurality of third weighting coefficients updated is inputted sequentially in giving the instruction of switching the weighting coefficients between the first weighting coefficients and the second weighting coefficients, and the instruction is given when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.

17. (Currently amended) A recording medium storing a program executable by a computer, the program including the modules for:

inputting a plurality of signals on which a processing is to be performed;
switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients to be temporarily utilized and a plurality of a second weighting coefficients which have higher adaptabilities;
giving an instruction of switching the weighting coefficients ~~between~~ from the plurality of first weighting coefficients ~~and~~ to the plurality of second weighting coefficients; and
synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, wherein
the signals to be input are burst signals, and
the switching between the plurality of first weighting coefficients and the plurality of second weighting coefficients is requested in the middle of a burst signal.

18. (Currently amended) A recording medium storing a program executable by a computer, the program including the modules for:

inputting a plurality of signals on which a processing is to be performed;
switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;
giving an instruction of switching the weighting coefficients ~~between~~ from the plurality of first weighting coefficients ~~and~~ to the plurality of second weighting coefficients ~~in a~~ prescribed interval, where the plurality of signals are inputted in a sequential manner during the interval; and

synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients, wherein
the signals to be input are burst signals, and
the switching between the plurality of first weighting coefficients and the plurality of
second weighting coefficients is requested in the middle of a burst signal.

19. (Currently amended) A program recording medium according to Claim 18, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

20. (Currently amended) A program recording medium according to Claim 19, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

21. (Currently amended) A program recording medium according to Claim 18, wherein the plurality of first weighting coefficients may be set by utilizing the plurality of second weighting coefficients used in the past for multiplication in the synthesizing which have already been set.

22. (Currently amended) A program recording medium according to Claim 18, the program further including the modules for:

updating a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;

estimating gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing a correlation processing between at least one of the plurality of inputted signals and a known signal; and

generating the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps.

23. (Currently amended) A program recording medium according to Claim 18, wherein the burst signals inputted during the prescribed interval in the sequential manner include at least a training signal and a data signal signals having different characteristics and wherein, in giving the instruction of switching the weighting coefficients between from the first weighting coefficients and to the second weighting coefficients, the instruction is given when it an end of the training signal is detected-a shift point where the characteristics of the signals change.

24. (Currently amended) A receiving method recording medium according to Claim 22, wherein the plurality of third weighting coefficients updated is inputted sequentially in giving the instruction of switching the weighting coefficients between the first weighting coefficients and the second weighting coefficients, and the instruction is given when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.